

ATOMS, STRATEGY AND POLICY

By Paul H. Nitze

AFTER much use in political debate, words tend to become leathery and pliable in the meanings they suggest. Perhaps they gain something in richness of implication but they lose in precision. For example, the word "policy" is used in two related but different senses. In one sense, the *action* sense, it refers to the general guide lines which we believe should and will in fact govern our actions in various contingencies. In the other sense, the *declaratory* sense, it refers to policy statements which have as their aim political and psychological effects.

Much of the discussion of recent months concerning Western atomic policy has been on the issue of "massive retaliation" versus "graduated deterrence." The phrase "massive retaliation" has been used by Secretary Dulles to describe a policy of relying for our security "primarily upon a great capacity to retaliate, instantly, by means and at places of our choosing." The phrase "graduated deterrence" has been used by a number of people on both sides of the Atlantic. Admiral Sir Anthony Buzzard, formerly Director of British Naval Intelligence, recently described it as a policy of "limiting wars (in weapons, targets, area and time) to the minimum force necessary to deter and repel aggression." Although many confusing subsidiary points have been raised, the main point at issue between the two concepts is the reliance which should be placed upon the capacity to bomb centers of population and industry with nuclear weapons.

The discussion of the two concepts would attain greater clarity if a distinction were maintained between the two meanings of the word "policy."

Our action policy has been, is, and, I believe, will continue to be one of "graduated deterrence." We do not wish or intend to use means beyond those which are necessary for the achievement of any given objective. It is obviously to the interest of the West that war, and especially atomic war in any form, be avoided if that is possible without submitting to even greater evils. Furthermore, it is to the West's interest, if atomic war becomes unavoidable, that atomic weapons of the smallest sizes be used in the smallest area, and against the most restricted target systems

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possible, while still achieving for the West the particular objective which is at issue. Judgments can differ as to the importance of various objectives, the military requirements for defending or achieving these objectives, and the feasibility of both sides maintaining in actual combat restrictions on the geographic extent of the fighting, the types of weapons used or the character of the targets attacked. The basic point remains, however, that it is to the interest of the West that the means employed in warfare and the area of engagement be restricted to the minimum level which still permits us to achieve our objectives. Our basic action policy must therefore be one of "graduated deterrence."

But how about our declaratory policy—the statements of policy which we make for political effect? There may have been very good reason for leaving the Soviet leaders in no doubt that we do not propose to be nibbled to death; that they cannot blithely choose areas and means of aggression as they see fit without running very real risks that we will be forced to expand the means or area of action as may be necessary to redress the aggression. The difficulty with the "massive retaliation" statement, however, was that to many people on our side it suggested that we would no longer take the measures necessary to contain local aggression with graduated means but would choose unlimited city-to-city atomic retaliation the moment we were given an excuse. Some people, in reaction to the massive retaliation statement, are urging that we declare our firm intention not to use hydrogen weapons except in retaliation for their prior use by an enemy. Some are suggesting other forms of self-limiting declaration. Others are persuaded that while we maintain a stiff upper lip and give the Russians no reason to believe we would lack the will to meet a crisis they will never test that will.

The difficulty with declaratory policy is that it tends to be ineffective in its political and psychological consequences if it deviates too far from action policy. To be clear as to the wisdom of a declaratory policy, one must be sure first that the action policy it suggests is one which is, and will continue to be, in conformity with our interests and with basic realities, and secondly that the political and psychological consequences of the declaration will in fact be favorable.

Let us go back, therefore, and examine some of the developments in the weapons field and their impact on both military and political strategy to see whether this throws any light on the type

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of action policy we can live with. Later we can look at the problem of what it might be wise to declare about it.

II

Many writers have suggested that an "atomic stalemate" has developed or is about to develop. The thought seems to be that as the Russian stockpile of atomic weapons grows both sides will realize that in an all-out nuclear war neither side can "win" and that therefore atomic peace (aside from some irrational action) is assured. I would suggest that the situation is more complex.

In the first place the growth of the Russian atomic stockpile and delivery systems (the bases, planes, missiles, crews, radars, etc., necessary to deliver them on target) does not tend to inhibit action by the Soviets. It merely inhibits the possibility of action by ourselves. If the Western monopoly was for many years a force for peace it is hard to see how the loss of that monopoly can, by itself, be a force for stability. It would seem much more plausible to look to the other development which has been proceeding concurrently with growth of the Russian stockpile—that is, to the great general advance in atomic weapon systems technology—for those forces in the weapons field which may be tending toward increasing stability.

During the past five years the power of individual weapons, the number of weapons available and the variety and flexibility of means for their delivery have expanded more rapidly than anyone at the beginning of that period thought possible. Power, numbers and deliverability are not just additive factors. It is not their sum but their product which gives an index of offensive potential. And the developments of recent years have raised their product to an entirely new order of magnitude. It is this change in the order of magnitude of offensive potential which increasingly raises the question as to whether any one can "win" an all-out nuclear war.

But the word "win" is another of our leathery words which can stand reexamination for precision of meaning. In one connotation the word "win" is used to suggest a comparison of the immediate postwar position of a country with its prewar position. In this sense none of the initial contestants "won" in the First World War or in the Second World War. It is probable that no one could "win" a third world war, in the sense of being richer, happier or better off after such a war than before it, even if no atomic weap-

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ons were used. If atomic weapons were used in all-out, city-to-city attack by both sides the conclusion is certain.

In another connotation the word "win" is used to suggest a comparison of the postwar position of one of the adversaries with the postwar position of the other adversary. In this sense it is quite possible that in a general nuclear war one side or the other could "win" decisively. Even a small initial imbalance in relative capabilities, other things being equal, could grow rapidly into a decisive imbalance as the war progressed.

Air warfare in general and atomic warfare in particular tend to be comparable more to naval warfare than to land warfare. In classical naval warfare, it has generally been true that if the main opposing forces became engaged, an initial superiority was progressively translated into complete and decisive victory, resulting in full control of the sea lanes for the victorious side. In land warfare, on the other hand, the side having the initial advantage often has become overextended as its forces advanced, as its lines of communication lengthened and as the population and forces of the defender were stimulated to greater efforts. A very great margin of superiority, often established only after a counter-attack, has usually been necessary for decisive victory on land.

In the last war, establishing control of the air took time, and that control was sometimes less surely established than was control of the sea in the days before the development of airplanes. But the addition of atomic weapons, with the prospect that hundreds of airfields could be permanently destroyed in a single day, make it probable that in any future war the process would be speeded up and be even more clearly decisive.

Some have argued that the destruction in an all-out nuclear war would be so great that nothing would remain, that life on this planet would be impossible, and that there would be no one left to "win," even in the second sense of the word. This is technically conceivable. The number of high-yield thermonuclear weapons which can be exploded in a short space of time without producing general lethal contamination of the atmosphere is finite. But it is a large number, one not likely to be reached unless the war is fought in an entirely irrational way.

If the above line of reasoning is correct, then in a nuclear war fought with some degree of reason one side may very well "win" in this second comparative sense and the other side lose. The victor will be in a position to issue orders to the loser and the loser

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will have to obey them or face complete chaos or extinction. The victor will then go on to organize what remains of the world as best he can. Certainly he will try to see to it that there is never again a possibility that the loser possesses nuclear weapons.

These two meanings of the word "win" epitomize the two main lines of considerations which flow from the present state of atomic technology. The first meaning brings out the horror and destruction which both sides in the contest, and mankind as a whole, would face in an all-out nuclear war—horror and destruction having as its upper limit the destruction of all life on this planet and as its lower limit such great losses even for the "victor" as to make any meaningful comparison with his prewar status impossible. It is this meaning of the word which brings out the reasons why it is of the utmost importance that nuclear war should not occur. We could not possibly "win" in this first sense. And we hope the enemy also realizes that he could not "win" in this sense either. The second meaning of the word "win," the comparison between the postwar position of the victor and the defeated, brings out why it is also of the utmost importance that the West maintain a sufficient margin of superior capability so that if general war were to occur we could "win" in the second sense. The greater that margin (and the more clearly the Communists understand that we have a margin), the less likely it is that nuclear war will ever occur. The greater that margin, the greater are our chances of seeing to it that nuclear war, if it does come, is fought rationally and that the resulting destruction is kept to the lowest levels feasible.

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Now is it possible for the West to maintain a position of sufficient superiority so that it could "win" in the second sense if the necessity arose? The answer would seem to be in the affirmative provided we take the necessary measures. This would be so even if we assume that technology, both in nuclear processes and in delivery systems, will tend in the long run to equality between East and West.

As the number of weapons possessed by the Soviet Union increases, the importance of mere superiority in numbers diminishes. As the significance of superiority in numbers diminishes, the importance of superiority in delivery systems increases. As the Soviets approach closer to equality in delivery systems, the

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significance of superiority in this factor also decreases. But if one assumes the existence of roughly equivalent capabilities in delivery systems, the significance of the geographic factor increases.

The United States is vulnerable to direct attack only from bases on the Eurasian land mass and from submarines. The U.S.S.R. is vulnerable to attack not only from North American bases but also from bases closer in on the periphery of the Eurasian land mass itself and from seas controlled by the navies of the West. Given anything approaching equality in numbers and quality of planes, missiles and the other elements of modern delivery systems, the geographic factor should give the West the possibility of a continuing and decisive margin of superiority. The very important emphasis which the Soviets are placing on this factor both in their diplomacy and in their propaganda indicates that they also recognize its importance.

On this line of reasoning, the controlling question is whether the West's geographic advantage can in fact be preserved in peace and asserted in the event of war. Can the West maintain, even in the face of smiling Russian tactics or renewed Soviet pressure and threats, sufficient cohesion in its alliances to make the geographic factor really count? The land bases ringing the U.S.S.R., close in, are subject to the sovereign control not of the United States but of the countries on whose territory they are located. A military policy which contributes to neutrality in those countries may rob the West of that geographic advantage which is potentially its greatest strength.

IV

The full significance of the geographic factor becomes evident only if one also bears in mind two other sets of considerations. One of these concerns the probable target systems in the initial period of a nuclear war. The other concerns the element of surprise.

A strong case can be made that no rational body of men would initiate a general atomic war unless they believed that the power of their initial atomic attack and its immediate effects on the enemy would be so great as to assure that the subsequent phases of the war would be substantially one-sided. In order to achieve such a one-sided result, the attacking side (either Russia in an initial attack, or the West in response to an aggression by Russia or China which could be met only by general war) would logically

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concentrate the full power of its initial atomic attack on the military—primarily the retaliatory—capabilities of the other side. The attacker's object would be to destroy, in the initial blow, a large proportion of the base structure from which the defender must launch his retaliatory action (including the planes or missiles on the bases and the submarines and carriers which might support the main retaliatory action). The attacker would attempt to destroy a sufficiently large proportion of this base structure to reduce the power of the defender's retaliatory action to a level which the attacker's own defense system could contain. If he should succeed in this attempt he will have assured that the remaining phases of the war will be substantially one-sided. Once he has gained effective control of the intercontinental air space, then his adversary's entire country, including cities, industries, means of communication and remaining military capabilities, will lie open to his will. He will presumably have much in mind the postwar problem of building a world which he can control and manage. He will want destruction of that world to be held within reasonable limits. He will wish his own country to be spared as far as possible. He will also want to destroy only as much of the enemy territory as is necessary for him to impose his will and get on with the job of making of the world what he wants and can make of it.

The side which has lost effective control of the intercontinental air spaces will face a truly agonizing decision. It may still have the capability of destroying a few of the enemy's cities. But the damage it could inflict would be indecisive and out of all proportion to the annihilation which its own cities could expect to receive in return.

Whether one side or the other could hope to achieve substantial control of the air during the initial phase of the war depends further on a number of factors additional to those already mentioned. One of these is base dispersal—the number and geographic distribution of air, missile and supporting bases. Another is air defense capability.

If the bases from which a Western strike can be mounted are 30 in number, the enemy will have a far easier task in establishing air control than if those bases are 300 or 3,000 in number and if they are geographically well dispersed and varied in character.

Of equal importance is the factor of air defense. If the Western early warning, radar, interceptor and defensive missile system is

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such that it can contain a coördinated Soviet surprise attack of 1,000 planes, that is quite a different thing than if it can contain a coördinated attack of only 100 planes. The point is that the technology of defense has also been making strides in recent years. From the technological standpoint, it is quite possible to conceive air defense systems which will have a very high probability of destroying all, or nearly all, planes of a small-scale attack. The problem is to design one that could stop a very high percentage of a large coördinated attack. This problem may not be insoluble. It is possible to foresee defenses even against intercontinental ballistic missiles, as Secretary of the Air Force Quarles recently announced.

This brings us to a discussion of the element of surprise and the advantage accruing to the side which strikes the first blow. If side A's base structure consists of a small number of bases and if side B's air defense system is able to contain a fairly substantial enemy retaliatory attack, then the advantage to side B of striking the first blow may be very great indeed. For the West to permit such a situation to develop in favor of the U.S.S.R. would be to encourage a dangerous instability in the air-atomic situation.

Sheer geographical extent is one of the elements necessary both for adequate base dispersal and for a comprehensive air defense system. This would seem to reënforce the point made earlier that the West has every prospect of being able to maintain a superior position in the nuclear attack-defense equations, but only if its available geographic advantages can be maintained as a vital element.

There are two further military strategy points which deserve mention.

If one studies the impact of weapons technology on military history, one finds that advances in mobility have generally favored the offense, and advances in firepower have generally favored the defense. It is quite probable that general availability of tactical atomic weapons, with the very great increase in firepower which they give, would tend to favor the defense in a war limited to a single theatre and in which long-range planes or missiles were not used. If so, significant advantages from modern weapons will accrue to the offense only if the nature of the conflict permits the full mobility and range of aircraft or long-range missiles to find play.

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mate technological equality between the two sides is assumed. And even then there are limits to its significance. A superiority of forces in being of three to one has generally been assumed to be necessary for the offense on land. If so, then a technological situation favoring the offense may reduce this to two to one, while a technological situation favoring the defense may raise it to four or five to one.

Colonel George A. Lincoln of the West Point faculty makes the further point that whether or not atomic weapons are ever again used in warfare, the very fact of their existence, the possibility that they could be used, will affect all future wars. In this sense Korea was an atomic war even though no atomic weapons were used. In this sense even the cold war is an atomic cold war. The situation is analogous to a game of chess. The atomic queens may never be brought into play; they may never actually take one of the opponent's pieces. But the position of the atomic queens may still have a decisive bearing on which side can safely advance a limited-war bishop or even a cold-war pawn. The advance of a cold-war pawn may even disclose a check of the opponent's king by a well-positioned atomic queen.

v

What action policy do these considerations suggest for the United States? To me they suggest the following:

(a) It is important that the West maintain indefinitely a position of nuclear attack-defense superiority versus the Soviet Union and its satellites.

(b) It is within the reasonable limits of what is physically possible for the West to maintain such a position indefinitely.

(c) To do so, the West will need to maintain at least equality, and if possible superiority, in atomic and weapons technology. It will need to maintain at least equality, and if possible superiority, in the manifold elements of effective atomic offensive and defensive weapons systems.

(d) In order to maintain a sufficient margin of superiority, so that even a surprise attack would give the enemy no prospect of achieving a one-sided result, the West must realize its geographic potential. Three corollaries flow from this proposition. We should develop an air defense system which makes full use of the West's geographic advantages. We should develop that widely dispersed base system which the West's geographic situa-

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tion makes possible. But, above all, we must maintain in full working order the system of alliances and those working relations with our allies without which the West will have no geographic advantage at all.

(e) In order to maintain the Western system of alliances we must, among many other things, develop a policy with respect to the conditions under which we would use atomic weapons in war—an action policy which we really intend to follow—which is consistent both with our own interests and those of our allies.

What might be the important elements of such a *use* policy, consistent with both our own interests and those of our allies? Its starting point would be our common interest in collective security. An attack on one ally must be considered an attack on all. We must not permit any ally who actively resists aggression to be overrun. We must have developed and be willing to use the strength necessary to restore the situation in the event of aggression. The elements of a common policy governing our use of atomic weapons might be the following:

(a) We should endeavor to meet aggression and restore the situation without the use of atomic weapons wherever this is possible.

(b) We should extend hostilities to other areas only if there is no other way effectively to restore the situation.

(c) Even if it becomes necessary to engage the U.S.S.R. in atomic warfare, we should limit ourselves to military objectives, primarily to those which are necessary to achieve control of the air. We should not initiate the bombing of industrial or population centers.

(d) We should attempt to build non-atomic elements of strength and to encourage our allies to do likewise so that the residual reliance which must be placed upon atomic weapons for our common security is reduced as far as may be feasible.

VI

Let us now discuss a few of the objections which might be raised to such an action policy.

Would we have any assurance that the enemy would not attack the cities of the West first? Obviously we would have no absolute assurance on this point. But assuming a maintenance of Western nuclear attack-defense superiority, it would seem wholly irrational for the enemy to do so. Every weapon he wasted

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on a city would be a weapon he could not use against our dispersed retaliatory base structure and a further contribution to the overwhelming destruction of his own cities which his attack would have invited.

Could we be sure that during the period that it took us to gain effective air control, and before the enemy had accepted defeat, he would not lash out to do what damage he could to our cities? Obviously we could not be sure. But the more thoroughly we had concentrated on his air-atomic capabilities, the greater the prospect that his attack would be disorganized and reduced to a scale which our air defense system could contain.

Is it possible to draw a distinction between industrial and population centers and air-atomic bases? Such a distinction presents real difficulties, but the importance of overcoming them is so great that it should be possible to do so. There is no reason why we, and the enemy as well, cannot locate military air bases more than a given distance, say 20 miles, from major population centers. There is no reason why high-yield thermonuclear weapons need to be used against base targets. Certainly, smaller population centers might be destroyed by near misses or other accidents. But is this not wholly different from the purposeful mass destruction of the urban populations of the world?

Would it not be expensive to create and maintain the military establishment required for air-atomic superiority in this sense? Certainly it would be expensive, but it would not be more expensive than we should and can afford. Today the West's expenditures for defense and gross capital formation are under 25 percent of gross national product. The Soviet expenditures for these categories are over 40 percent. Certainly the West could afford to allocate an additional 2 to 5 percent of its gross national product to defense if this is essential to survival. An effort short of what is adequate may obtain no useful results at all. The last 10 to 20 percent of the resources expended may be the ones that really count and validate the entire investment.

Would it not be even more expensive for us and our allies to carry, in addition, the costs of non-atomic defenses required to reduce the pressure on our atomic defenses? It would be. Europe, for instance, probably cannot carry the full costs of both atomic and non-atomic defenses.

In order for Europe to acquire an adequate defensive posture within its means it will probably have to rely on the help that

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(IRBMS) } tactical atomic firepower gives to the defense as well as on the backing of the strategic air power of the United States. But if we expect NATO to continue as a vital organization we should lose no time in spreading the air defense system to Europe. Nike batteries would offer substantial protection now, and later technological developments should improve it. And, above all, Europe must understand that war is not synonymous with Armageddon. We should make it clear that, if we all stick together, war is unlikely—that city-to-city air attacks are not part of our policy—and that, even in the event of atomic war, Soviet attacks on metropolitan centers would be only a final act of desperation and irrationality against which as effective defenses as are technologically possible will have been provided. NA

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implemented.
Would an action policy as described above serve to defend Asia and the Middle East? If we were clear in our minds that there is no easy way of defending Asia and the Middle East merely by statements threatening "massive retaliation," we might find it easier to address ourselves to the realistic actions which would in fact strengthen those areas. But when all is said and done, we probably must continue to rely in part on our nuclear attack-defense superiority. The Soviets must be left in no doubt that if there were to be an outbreak of massive military aggression in either area, and if the situation could not be restored by mobilization of the non-atomic strengths available, rather than accept defeat without fighting, we will fight and from a superior nuclear attack-defense position.

VII

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If some such action policy is one with which we could live, what should our declaratory policy be? This question should be decided only after we had taken the necessary measures to make our action policy operable and had fully consulted with our allies. It is quite possible that taking the actions necessary to implement such a policy would be more impressive to the Russians than any declaration we might make. The more we can bring our action policy and our declaratory policy into line with each other the more effective both become.

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Nitzge/Kahn — a Dulles, fully implemented.

The Relationship of Strategic and Theater Nuclear Forces

Paul Nitze

Five aspects of the relationship of strategic and theater nuclear forces are addressed in this essay, as well as some of the early policy discussions that surrounded the development of these forces. The first aspect concerns the notion that, in this relationship, the balance at each significant level of potential violence—or of deterrence—affects and is affected by the balance at higher and lower levels. Implicit in that notion is the idea of a hierarchy of potential levels of violence. I suggest that at least ten and perhaps eleven levels can tactically be distinguished and that the relationship between strategic and theater nuclear capabilities involves the interaction among at least five of these levels.

Second, at each interface between levels, at least four questions arise: 1) What would be the probable military outcome of combat at that level? 2) What would be the degree of collateral destruction implicit in combat at that level, including the social and political destruction to each side? 3) What is the likelihood that either side would initiate or be deterred from initiating combat at this or higher or lower levels of combat? 4) What is the degree of clarity or ambiguity of the cut-off line between one level and the next?

A third aspect of the relationship requires the recollection of some of the turning points in American thought about the interface between strategic and theater nuclear conflict.

Fourth is a discussion of strategic rivalry and the potential use of nuclear force, at the relative force levels of deterrence, as I believe the situation is likely to evolve during the next few years. Finally, there is comment on how we might approach the problem and what we should do about it.

Hierarchy of Potential Violence

To begin with the first aspect: What hierarchy of levels of potential violence—or what many would call levels of deterrence—come to mind? Ten levels are suggested:

1. Intercontinental, primarily counter-value, nuclear war.
2. Intercontinental primarily counterforce, nuclear war.

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3A Unilateral use
of theater weapons
in opponent's territory

4A Unilateral use of
theater weapons on opponent's
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3. Theater nuclear war in which intermediate gray-area weapons, such as the SS-20, Backfire, G Class submarines, UG-111, intermediate range cruise missiles, and the like, are used

4. Forward Edge of the Battlefield (FEB) nuclear war with both sides primarily using shorter range weapons close to the line of contact between the opposing forces; neither superpower using its intercontinental or gray-area weapons, and both superpowers avoiding the territory of the other.

5. Unilateral use by the country attacked of tactical nuclear weapons in self-defense on and over its own territory.

6. Conventional war with both superpowers actively participating

7. Conventional war with only a single superpower actively participating.

8. Conventional war with client states only participating.

9. Civil war or guerrilla war in its various forms.

10. Political, economic, and psychological warfare.

Some would add a zero-level ahead of intercontinental nuclear warfare, that is, a contest limited to space with the purpose of dominating what General Robert Richardson in the late 1950s used to call the "high ground," from which, if captured, the intercontinental battlefield could be dominated.

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Interface Among Levels

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There is a relationship among the first five levels. By and large, it can be said that the Soviets look upon a relationship favorable to them at the intercontinental nuclear levels—levels one and two—as being the fulcrum upon which all other means of influence, coercion, or deterrence depend. But they put their primary emphasis on level two, the intercontinental, primarily counterforce, level. By and large, Americans look at the issue similarly, but with primary emphasis on level one, the primarily countervalue level, rather than level two. But it is wise to consider this question historically and in greater detail.

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There is no clear cut correlation when one attempts to relate Soviet external behavior to the state of the intercontinental nuclear balance over time. In late 1945, 1946 and early 1947, the Soviet Union acted with great determination and made considerable political gains beyond its borders despite the American nuclear monopoly. But the United States then had too few nuclear weapons of too little power to be truly decisive in the event of war. As America's rapid demobilization progressed, the United States and its allies became clearly inferior in strength to the Soviet Union in forces affecting the nonnuclear military balance along the periphery of the Soviet Union.

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attack beyond its periphery, but only at level eight—through client states, first North Korea and then the People's Republic of China. Thereafter, up to the present day, another factor entered into the strategic decision equation. Even though the United States during almost all this period enjoyed clear nuclear superiority, the damage potential of those Soviet forces which could be expected to survive a U.S. counterforce attack would be great enough to devastate a large percentage of American cities. At level one, mutual deterrence can cover a fairly wide band of unequal relative destructive capabilities. It is that consideration which may have led Dr. Kissinger to ask, "What is nuclear superiority? What can you do with it?"

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The band of tolerable inequality is not, however, infinitely broad. If probable casualties and damage to one side would be three, five or ten times the probable casualties and damage to the other, and if the absolute number of casualties on the stronger side would be a small percentage of total population, it is not clear that the weaker side should or would meaningfully respond to a counterforce attack. The stronger side cannot be wholly confident that there would be no response, but it can act with greater confidence in such a situation. When the probable ratios are not that one-sided, even the stronger side must act with caution. It is because Soviet leaders believe that such one-sided ratios may be achievable that they concentrate so heavily on all aspects of level two, and on the civil defense aspects of level one.

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The History of the Nuclear Relationship

The first serious discussion of the relationship of the strategic nuclear, to the conventional, and to the tactical nuclear levels took place in the winter of 1949-50 after the first Soviet nuclear weapon test. Those involved were Dean Acheson, George Kennan, Robert Oppenheimer, and myself. Secretary of State Acheson discussed with Kennan and me what should be done in the light of the new situation. One weekend he wrote out a paper summarizing his views on the subject. The following Monday he called us in and read it to us. In it, Acheson made the point that over time, the Soviets were bound to narrow America's technological lead in the nuclear field. The margin of American nuclear superiority would tend to become less and less significant as the years went by. Therefore, the United States and its allies should address themselves to restoring the conventional military balance. I felt that it would be extremely difficult in time and effort to restore the conventional military balance in Europe—the geography and the political climate were against us—and that the United States therefore should try to pre-

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Boys

serve nuclear superiority as long as possible while concurrently working at righting the conventional balance. George Kennan found nuclear weapons to be evil, but he also disliked large-scale conventional forces. He thought that the answer was to be found in greater diplomatic skill.

or differ / Wallow : relation to SU, ON, TW...

At that time, as today, the approach of most Americans to great power rivalries was to draw a black and white distinction between war and peace, with peace being the normal situation and war a radical breakdown of that norm. The Soviet approach appeared and still appears to be much more Clausewitzian. It looks at peace as a continuing struggle for dominance between what they call the socialist commonwealth, or the camp of "peace and freedom," led from Moscow, and the "imperialist camp," led from Washington. War is viewed as a continuation of peacetime policy with the admixture of military means. A common view in American writings is that there is an inconsistency between "detente" and a continuation on the Soviet side of hostility, struggle, and urgent preparations for war. The Soviet spokesmen not only see no such inconsistency, but describe "detente" both as resulting from past Soviet successes in shifting the correlation of forces in its favor and as being necessary for its further evolution to a point where reversal is no longer possible.

Another aspect of American thought about the strategic/theater nuclear weapons relationship is the common distinction between forces capable of deterring an attack by the other side and forces capable of defeating an attacker and, if deterrence fails, of winning the resulting war. Soviet spokesmen see deterrence and a war-winning capability as complementary, not opposing concepts. To their mind, a Soviet force capable of defeating any attacker and going on to win the resulting war is clearly better able to deter the other side than any lesser force. They note that such a Soviet force could be even more effective if used in a preemptive rather than in a retaliatory strike, and propose thus to act should the issue arise. They fully understand that the United States may wish to deter them, but they see no reason to make that task easier for us. In fact, they see every reason to make it more difficult.

SRE (= SAC)

The next serious debate concerned John Foster Dulles' doctrine of massive retaliation with weapons, and at times and places of America's choosing. In those days I gave a lecture about the seven pillars of unwisdom. One of those pillars was the erroneous belief that one could place all one's confidence in propaganda and cosmetics. I was attacking the viewpoint that, if one blew the horn of bold declaratory statements loud enough, the walls of the Kremlin would fall down, even though one was neglecting the preparatory steps necessary to give one the capa-

like k

SO generals view Khrushchev, and his "parade" and bluffs.

*How, Kennedy attacked the!
(He was a clown, not Kennedy/Nixon)*

bility of following up those declarations with action. It is noteworthy that while Dulles was making his famous speech, President Eisenhower was insisting that five billion dollars a year be cut from the defense budget (cuts which came largely in the B-52 program).

*But... (4/12)
AJW*

It was Dulles' massive retaliation doctrine which caused Henry Kissinger to write, in 1956, his book on nuclear strategy. Kissinger correctly came to the conclusion that we ought to have our heads examined if we were to choose escalation to level one, if the result of that choice would be that most of our cities and their inhabitants would be destroyed. It was his thought that there must be some alternative.

The alternative he came up with was to substitute tactical nuclear war under strict ground rules. Those rules were that all cities over 50,000 in population were to be sanctuaries and elsewhere no weapons with a yield greater than 500 kilotons were to be used. In getting to his 500 kiloton figure, he had erroneously assumed that the area of damage is proportional to the cube root of the yield, not the square of the cube root. But this was only one of a host of problems with his proposal. There was no possibility that the West Germans would or should buy the proposal. There was no possibility the Russians would buy it. It was not monitorable or enforceable. The main point, however, is that no real thought had been given to the probable military outcome of such a nuclear war, nor to the collateral damage to be expected.

*i.e. the
nuclear
paradox
and
nuclear
bombs.*

*? Was Nixon
in there?*

In 1958 I tried my hand at a quite different approach in an unpublished paper that was cleared by Secretary Dulles and was widely circulated. It was entitled, "An Alternative Nuclear Policy as a Base for Negotiations."

A few paragraphs from it are noted here:

get?

1965-

1979-

... As we move further along toward a technologically developed world what is the proper role for nuclear deterrence? As the students of these matters consider the probable increase in Soviet offensive and defensive nuclear arms they tend to cut down the range of possibilities it seems prudent to cover through nuclear deterrence. As they consider the high cost and difficulty of developing adequate non-nuclear means to deal with the middle range of Soviet-Communist military threats, they tend to expand the range of issues they believe must be covered by the threat of nuclear deterrence if we are not to see one position after another surrendered to the Communists. Where they finally come out, after considering various aspects of the question, depends in part on what they think the United States should and can do about two other parts of our defense programs--one of these is civil defense, including a major shelter program, the other is the recreation of modernized and substantial non-nuclear military forces by ourselves and by our allies.

... Obviously everyone who thinks about these matters at all has been looking

for some other answer. The suggestion is the proposal that we put a substantial effort into developing what are called tactical nuclear weapons and attempt to work out policies and military programs under which the Communist military superiority in non-nuclear weapons is overcome by these tactical nuclear weapons. It is argued that we would then not have to risk general destruction of the United States in support of distant and peripheral situations. This proposal runs into many and, I believe, insurmountable objections. The basic difficulty is that the Russians are also developing tactical nuclear weapons, and will probably give them to their satellites if we give them to our allies. Big armies equipped with tactical nuclear weapons are apt to be able to overwhelm small armies equipped with conventional weapons more rapidly and just as decisively as big armies with conventional weapons can overwhelm small armies with conventional weapons. Furthermore, in many situations the advantages of geography become greater for the Communists if both sides are assumed to be using nuclear weapons and the advantages which we derive from sea power become less.

It is the purpose of this article to suggest a third possible answer to our problem. The proposal is that we make one and only one exception to the general rule that nuclear weapons should not be used by anyone at all and that the purpose of nuclear armaments should be solely to see to it that they are not used by others. This one exception would be that any country which is militarily attacked by forces crossing its borders can, if it wishes, unilaterally use nuclear weapons within its own borders to repel and drive out the aggressor and can also call for and receive the support of the United States and all other nations proposing to support the provisions of the United Nations Charter. Let us assume for the moment that the Soviet Union has attacked Iran. The exception would provide that Iran can then use appropriate nuclear weapons solely within Iran, so they explode on or over territory within Iranian boundaries, to drive back and repel the Soviet invaders. The Iranians could simultaneously look to us and all other nations prepared to resist Communist military aggression for full support in troops and weapons, including nuclear weapons suitable for short range tactical defense. The actual firing of the nuclear weapons should be in Iranian hands so that whatever damage was unavoidably done to Iranians as a by-product of repelling the invaders would be under the full control of Iranians. The sanction of United States general nuclear capabilities would be ready and continuously available to see to it that the Russian invaders used no nuclear weapons whatever and that the Iranian defensive use of nuclear weapons remained unilateral.

to do what?
FU? FS?

of the...
what?
why, then, confer
it to them?

Many agreed with the core of the idea but few really wished to push it. One exception was Dr. John Foster during the days when he was running the Lawrence Livermore Laboratories. He came up with the idea that one could help implement the concept by implanting atomic demolition munitions (ADMs) some 200 feet below the surface, some four or five to the mile, across the north German plain. This would provide the capability of instantaneously creating a more or less im-

passable ditch across the most vulnerable route of access to Western Europe. He had the laboratory develop the necessary low-radiation devices and the necessary control equipment to make them invulnerable to sabotage or theft. In 1964, the U.S. Army created a panel to review tactical nuclear doctrine. John Foster and I were both members of the panel and tried to get the Army to look seriously at the proposal. We were wholly unsuccessful.

Since that time, much work has gone into studying the fourth or battlefield level of the hierarchy, particularly at the FEBA and to some extent also against deeper targets in Poland, Czechoslovakia, and Hungary. But it is my impression that the cut-off line between that level and the third level (the theater level)—involving the use by NATO and by the Soviet Union of intermediate range weapons based in the Soviet Union—remains largely unexplored. It is hard to imagine the Soviet Union being a sanctuary from nuclear response while its intermediate range weapons are being used to assure a theater victory. It is similarly difficult to imagine Soviet territory being attacked while U.S. territory remains a sanctuary from attack. It therefore seems more logical to associate level three more closely with levels one and two than with levels four and five.

Strategic Rivalry and the Use of Nuclear Forces

We are now in the position, foreseen by Dean Acheson in 1949, where the significance of our nuclear superiority has greatly eroded, if it has not already disappeared or turned negative. The question of parity and what it means depends on another issue. That is the issue of whether the proper level of intercontinental nuclear warfare on which to concentrate our attention is level two—the counterforce level, the level the Soviet planners appear to concentrate on—or level one—the countervalue level most Americans concentrate on.

In the latter case, disparities in levels of intercontinental capability can appear to be relatively unimportant within a fairly wide range, say, ratios of two to one or even three to one. But if one side ignores level two and the other does not, the ratio of capabilities remaining after an initial counterforce attack, and a fortiori, after a counterforce exchange, is apt to be very wide indeed. Furthermore, the ratios of relative destruction to people and industry are apt to be even more imbalanced if one side ignores civil defense and the other does not.

We are entering into a period where the situation at levels one and two is apt to be quite different in the future from what it has been in the past. We are not likely to have any excess capability at the intercontinental level to help enforce restraints at levels three, four and five which involve the use of nuclear weapons

30 years later



To the extent that this matters (Publication),

Understand that US ignores MX, if we get MX...

c.e. to make US use of nuclear weapons, or escalation, unilateral, or safe enough to be credible + useful.

* New (1979) man: Highly precise Perhaps (low yield) attack base et Initial set of military targets - SU.

of less than intercontinental range. And we are not likely to have any margin of superiority at level four—so-called FEBA nuclear war—to offset clear Soviet superiority at level three, a theater nuclear exchange.

But as Nitz said, the gov³ quickly up to 2011

THE GLOBAL CHALLENGE

The Soviet view of the European, Far Eastern, and Middle Eastern theaters is different from the American. For them those theaters are the areas of primary strategic interest. The United States is of importance to them primarily because America threatens to impede the pursuit of their strategic interests in those theaters. In this light, one has to ask if there is any connection between what is happening in the Middle East and South Asia to the extraordinary arms buildup which is progressing within the Soviet Union and in the Warsaw Pact area, and, in particular, with respect to the efforts that the Soviets are making in the field of strategic nuclear weaponry and civil defense. I believe that there is. Quite simply, why are they putting such emphasis on being able actually to fight a nuclear war, including such a vigorous civil defense program?

not
US for SU
+ civil war

The Soviet Communist Party has been highly persistent in its pursuit of long term goals. In contrast to the fixity of these goals, however, Soviet planners seem to favor a high degree of flexibility in the strategy and tactics appropriate at any given time to support movement toward these goals. I would be surprised if they themselves had settled on any one strategy and the accompanying set of tactics. They probably have several strategies in mind—the choice between them at any given time being determined by their assessment of evolving risks and opportunities.

As an example, one such strategy might have as its central objective the achievement of the long term Russian goal, going back to the days of the czars, of achieving hegemony over the general area of the Eastern Mediterranean, the Red Sea and the Persian Gulf. Such a strategy would require a military foundation adequate to deal with all the possible contingencies. The local states in the area would be in no position to resist overwhelming Soviet military strength in the absence of military support from outside the immediate area, essentially from the United States. How geographically and logistically might the United States bring such support to bear? Soviet planners might well judge that the most effective way would be through the use of forces and bases in NATO Europe. How could Moscow best deter NATO/Europe from collaborating with or even permitting such use? By building up the Warsaw Pact forces to a point of potential military predominance and politically by actively supporting Communist adherents and sympathizers in Western Europe.

true?

— 17

* OK- ask, Wf are the no concern about deterring a US attack (or living danger)?
"(How) do they expect to 'provoke' us?"

** By threatening horizontal use to Europe; and/or
(- fear of US hopes to do so) making conflict in Euro look worse.

or - if US wants to keep SC
out of Iran, how (would they
say) should we do it?!

How else might Moscow see the United States bringing countervailing power to bear? One route would be through the Indian Ocean and the entrances to the Red Sea and the Persian Gulf. Access to those approaches could be made difficult through a network of cooperating bases and facilities in such locations as Somalia, Eritrea, Socotra, South Yemen, Iraq and Mozambique. They might judge another potential route of access to be the approaches to the Eastern Mediterranean. To make this route more difficult, facilities in West Africa, Portugal, or Libya would be valuable.

What we have seen, and see, being done in Europe, Africa, the Middle East, the Indian Ocean and South Asia is not inconsistent with Soviet attempts to build the infrastructure to support such a Middle Eastern strategy, among others.

But viewed from Moscow, there would still remain the danger that the United States would place its strategic nuclear forces on alert if it considered its vital interests in the Middle East to be at stake; after all, the United States had done so during the October 1973 Middle East war. How could Moscow best deter such potential offsetting pressure? By working to achieve a preponderant nuclear strategic deterrent posture.

o.e. US
FS

But still the United States might not be deterred if its truly vital interests were at stake. Therefore it would be wise for the Soviet Union to put itself in a position actually to fight a nuclear war, to win militarily and to survive as an ongoing political entity, if the United States were, in fact, not deterred. In that context it would make sense for Moscow to develop offensive nuclear weapons with a strong counterforce potential and also seriously to plan and organize an effective civil defense program in peacetime.

or: "pre-emptive"
or, to
back off!

THE USE OF THEATER NUCLEAR WEAPONS

The Soviets have always placed their intermediate range missiles under the command of their Strategic Rocket Forces. When we set up the SALT talks in the late 1960s, we had no doubt that all those forces were strategic forces, as had been our Jupiters, Thors, and B-47s. The distinction between such forces and intercontinental nuclear forces is an arbitrary distinction arising from the anomalies of SALT.

USG
referred
to committee!

The United States has tended to ignore this third level, while the Soviets have given it much attention. When one considers the capabilities that the Soviets are developing through large numbers of SS-20 MIRVed missiles, ICBMs which are also capable of shorter ranges and dedicated to theater targets, and Backfires, Floggers, and Fitters, one finds an enormous potential of precise firepower. The United States can only offset those capabilities in the future by dedicating increasing portions of its "central forces" to the task. We can ignore this problem only

US def.

No

at our peril. Any significant level of deterrence left largely uncovered constitutes an invitation to one's opponent to exploit the gap.

Another point is that reductions in intercontinental forces along the lines now proposed by Secretary of State Vance, if the proposed freeze on technological improvements proves nonnegotiable or ineffective, can have the effect of increasing the significance of the balance of deterrence at the next lower level of deterrence; specifically, at level three—theater nuclear war.

It is worth noting that in the early 1960s, when the United States enjoyed clear-cut nuclear superiority, but not monopoly, there was even then doubt as to the political credibility of American assurances that it would use its nuclear shield to protect Europe. In those days, one of the principal functions of U.S. tactical nuclear weapons in Europe was to close that gap in the chain of deterrence. The theory, and I believe it was correct, was that it was politically more credible that the United States would make the decision to use tactical nuclear weapons to back up inadequate conventional forces than immediately to order the use of intercontinental forces. The theory, however, depended upon U.S. effective superiority at levels one, two and three. With parity or less at those levels, it loses much of its persuasiveness. And as a final point in this section—the third level problem is not restricted to Europe. It applies to the Middle East and the Far East as well.

Conclusion

How might we approach the question of what to do about increasing Soviet nuclear capabilities, in light of the relationship between tactical and nuclear weapons? I asked that of someone who was recently briefing me on some aspect of this problem. He answered that the first requirement is to understand and face the facts; many are not willing to do that. On that matter I agreed with him, but noted that at some point, one must go further and decide what to do in the face of these facts. The first question to be resolved is whether to concentrate on the countervalue level, on the theory that no sane Russian would think of risking the damage that even a limited retaliatory strike on his cities would produce, or whether to concentrate on denying the Soviets a superior intercontinental nuclear war-fighting capability. It is my view that the latter alternative is the correct one. In the former case, it is not clear that we should respond in the face of the certainty of far greater destruction to our cities, industry, and population than to theirs.

As to the theater nuclear war level, I see no way of offsetting Soviet capabilities other than through additions to U.S. intercontinental and gray area systems. Substantial numbers of cruise missiles appropriately based may be a partial an-

if he ignores the costs, risks.

YES!
- vs. "flexible response"
Adm. - 2
1967!

o This isn't enough - ^{US} superiority
not parity, is needed!

Ha! Ridge's solution
go for clear
US
superiority
at 2
and 3.

what if: equal, or better, but
disadvantage to both? (I would!)

See Ridge - Kestel: 75 CHs for "front - the door"

* or: cease relying on levels 1-5 to deter or win conflicts 6-10! Rely on mass attrition nuclear threats, or else construct arms!

swer. The proposal that the full array of gray area systems be added to U.S. thinking about SALT, and be included in the design of the positions the United States take with the Soviets in negotiations on SALT, seems to me to have merit.

I believe there is also merit in taking another look at the fifth level (the unilateral use by a country being attacked of tactical nuclear weapons in self-defense); including the ideas which were—and are—being worked on in U.S. laboratories that look toward implementing that concept. To have a chance of maintaining successful deterrence at that level, the United States would have to be sure that the Soviets were precluded from achieving meaningful ratios of superiority at higher levels.

at least! Really need US superiority!

Finally, I believe we must continue to work at level four, FEBA nuclear war with both sides primarily using shorter range weapons. Clearly survivability, dispersal, and reliable command and control are crucial. Perhaps cruise missiles in large volume can make an essential contribution to providing deterrence at that level as well. But we must always keep in mind that the central task of an effective U.S. defense is to maintain stability and overall equivalence within the intercontinental countervalue and counterforce levels.

N-levels

*IWD
(between
Deltamar)*

*Preferably
superiority!
(as Nitze
said - 49!)*

*S. e. since 1949, Nitze has consistently
pushed for nuclear superiority — ^{at levels of 1, 2, 3, 4, 5} using
whatever public arguments needed to achieve
public support — for protection of American
interests in Europe, ME and Asia — (Africa, now?)
(Latin America?)*

*so as to use US threat of escalation
to level 5 or above to win or deter
conflicts at levels 6-10. (Assuming we could
not achieve ^{non-nuclear} superiority — in all the regions of
US interest, including the most important ^(ME) —
at levels 6-10, if so. Otherwise, and that
"diplomatic skill" would not compensate — as Kennan.
(Opposition attached?)*